

CLAIMS

What is claimed is:

1-10. (Canceled)

11. An interchange urban road system comprising:

a road for motor vehicles; and,

a traffic lane for non-motor vehicles arranged in essentially a grid-pattern road network with a double-layer road structure, in which one layer is a motor way on the ground and another layer is a footway at a suitable elevation above said motor way, wherein said footway is located, at least one of, over the motor way with the footway having a width substantially corresponding to the motorway, and/or above each side of said motor way wherein each of the sides of the footway are connected with a passageway.

12. An interchange urban road system of claim 11, wherein said motor way comprises an expressway and a minor arterial, wherein an over bridge is positioned at an expressway intersection, wherein said minor arterial is a ramp.

13. An interchange urban road system of claim 11, wherein at least a part of said footway layer proximate an intersection of a collector street is constructed as ring pathway or aerial square.

14. An interchange urban road system of claim 11, wherein said footways comprises a sidewalk and a traffic lane for non-motor vehicles provided at the same level.

15. An interchange urban road system of claim 11, wherein a turnaround passageway is positioned at least one or more of the following locations: an expressway intersections and/or under an over bridge of said expressways.

16. An interchange urban road system of claim 12, wherein a minor arterial is provided between two parallel expressways as a ramp for said parallel expressways and as a passageway to a subzone way.

17. An interchange urban road system of claim 11, 12, 13, 14, 15, or 16, wherein a plurality of buildings positioned on the ground and beside said sides of said road, each comprise a first floor layer at an aerial layer, wherein said first floor layer is provided for at least one of parking, urban forestation, transportation construction, and/or circumnavigating of said vehicles under emergency conditions; wherein said footways are connected with a roof of said first floor layer of said buildings, and wherein said aerial layer is provided for parking.

18. An interchange urban road system of claim 11, 12, 13, 14, 15, or 16, wherein at least one of a U-turn road and/or a special ramp within a city boundary, and/or an over bridge for a left turn, is provided proximate a branch road of said expressway, wherein said branch road is provided on the minor arterial.
19. An interchange urban road system of claim 11, wherein latticework of said essentially grid pattern road network is changeable in form, and wherein said road is at least one of a linear road and/or a curved road.
20. A traffic method of using the interchange urban road system of claim 11, 12, 13, 14, 15, 16, or 19, comprising an expressway and a minor arterial for constituting a motor way, an over bridge positioned at a location of an expressway intersection, wherein vehicles at least one of travel straight ahead and/or turn to a travel side, along a travel direction on the expressway, wherein vehicles can only turn left on the expressway in a region where traffic keeps to the left, wherein vehicles can only turn to the right along the travel direction on the expressway at a region where the traffic keeps to the right, and wherein said minor arterial is a ramp.